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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,640	03/10/2004	D. Ryan Breese	88-2071A	4212

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EXAMINER	
WOLLSCHLAGER, JEFFREY MICHAEL	
ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/797,640	BREESE, D. RYAN	
	Examiner	Art Unit	
	JEFFREY WOLLSCHLAGER	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-13 and 16-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-13 and 16-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims filed January 17, 2008 has been entered. Claim 1 is currently amended. Claims 5, 14 and 15 have been canceled. Claims 20-24 are new. Claims 1-4, 6-13 and 16-24 are pending and under examination.

Claim Rejections - 35 USC § 112

Claims 1-4, 6-13 and 16-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the original disclosure does not appear to provide support for a multilayered film consisting of layers selected from an LLDPE, HDPE, MDPE and mixtures thereof. The examiner notes that the original disclosure makes it clear that at least one of the layers in the multilayered film must be an LLDPE and at least one of the layers in the multilayered film must be either an HDPE or an MDPE. The examiner submits that currently amended claim 1 no longer requires this configuration and includes multilayered films having layers of HDPE and layers of MDPE with no layer of LLDPE required. Further, the examiner submits there is no support in the original disclosure for mixing the polyethylene materials to form "mixtures thereof" for forming the multilayered films. The examiner submits that the original disclosure does appear to provide support for a multilayered film wherein the film consists of at least one layer of an LLDPE and at least one layer of an HDPE or MDPE. As to claims 21-24, the original disclosure does not appear to provide support for the specific recited

three layer configurations. Claims 2-4, 6-13 and 16-19 are rejected as dependent claims. This rejection may be overcome by pointing to the page and line number in the original disclosure where support for the recited three layered polyethylene films may be found.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 20-24, the limiting effect of the recited layer configurations is unclear. It is unclear whether the configurations limit the claim to an outer layer/middle layer/outer layer configuration in the order set forth in the claims or whether the claim only requires that the type and number of the recited layers be employed (e.g. in claim 20 – 2 layers of LLDPE and 1 layer of MDPE).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 13, 17-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Loos et al (WO 03/008190).

Regarding claims 1, 6, 13 and 17-19, Loos et al. teach a method of producing a monoaxially drawn polyolefin multilayered film (Abstract) wherein the film is stretched in a multi-stage stretching process. In the multistage stretching process, the film is provided to a subsequent stretching stage already produced and previously stretched (thereby meeting

limitation (a)). The film is heated to a higher temperature in the subsequent stretching stage to a temperature less than the melting point (page 9, lines 3-25; thereby meeting limitation (b)) and the stretch ratio in each of the multi-stages is the range of 1.1 to 50; preferably 2 to 10, and more preferably in the range of 3 to 8 (page 8, line 18-page 9, line 3). The examiner notes that the stretching of the film is maximized right up to the point of breaking the film (page 9, lines 3-25) and that the amount of subsequent stretching disclosed by Loos et al. meets the required degree of stretching set forth in the dependent claims (e.g. claims 17-19). Furthermore, the film layers materials employed by Loos et al. consist of a central layer of HDPE and outer layers of LLDPE and the like (page 6, line 6-25).

As such, the examiner submits that Loos et al. disclose a method that employs the same claimed steps and claimed materials and stretches the film at the same draw down ratio set forth in the dependent claims. Since the dependent claims are necessarily more narrow in scope than the independent claims, the examiner submits that the process set forth by Loos et al. necessarily achieves the same claimed effects and physical properties (i.e. the film is caused to delaminate and has a dart-drop strength that increases with increasing draw-down ratio).

As to claim 2, Loos et al. disclose the density of the HDPE is at least 950 kg/m3 (page 6, lines 6-10).

As to claim 21, Loos et al. disclose a LLDPE outer layers and an HDPE central layer arrangement (page 6, lines 6-25)

Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Loos et al (WO 03/008190) as evidenced by Applicant's admitted prior art (US 2005/0200046).

As to claims 3 and 4, the claimed densities are substantially, by definition, the art accepted densities of the recited materials as is acknowledged in the instant disclosure

(paragraphs [0002-0003]). As such, when Loos et al. recite "LLDPE" this is, by the generally accepted definition, a material within the broadly claimed density range. Regarding "MDPE", the examiner notes that an MDPE layer is not necessarily employed in claim 1 or claim 3

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loos et al. (WO 03/008190), as applied to claims 1, 2, 6, 13, 17-19 and 21 above, further in view of Go et al. (US 4,577,768).

As to claims 7-12, Loos et al. teach the method set forth above. Further, Loos et al. disclose an HDPE molecular weight of 250,000 (page 6, lines 6-10). Loos et al. do not teach the applicable MW and MN properties of the LLDPE and HDPE. However, Go et al. (Table II) provide teaching of the conventional and suitable ranges of molecular weight/number properties for HDPE and LLDPE suitable for employment in the molding art.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed conventional and art recognized suitable ranges for the molecular weight and molecular number of the polyethylene's employed in the method of Loos et al. for the purpose of employing readily available and cost effective materials with a high expectation of success.

Claim 16 is rejected under 35 U.S.C. 103(a) as being obvious over Loos et al. (WO 03/008190), as applied to claims 1, 2, 6, 13, 17-19 and 21 above in view of Harp et al. (US 5,024,799).

As to claim 16, Loos et al. teach the method as set forth above. Loos et al. do not disclose the relative speeds of the stretching rolls. However, Harp et al. employ a process of stretching film where material is fed from a series of rolls where the speed is controlled at two to ten times the incoming film speed. (Figure 1; col. 3, lines 11-57).

Therefore it would have been prima facie obvious to one having ordinary skill in the art at the time of the claimed invention to have employed the speed arrangement as set froth by Harp et al. in the method of Loops et al. since Harp et al. suggest such a configuration is an art recognized equivalent and alternative stage for stretching a film.

Claims 20, and 22-24 are rejected under 35 U.S.C. 103(a) as being obvious over Loos et al. (WO 03/008190), as applied to claims 1, 2, 6, 13, 17-19 and 21 above, in view of White et al. (US 6,013,378).

As to claims 20 and 22-24, Loos et al. teach the method set forth above. Loos et al. do not expressly claim the disclosed layers of a particular density. However, White et al. teach a method of forming a film wherein they demonstrate that it is known in the art to provide a variety of film configurations for polyethylene films have different densities to achieve desired results (col. 1, lines 44-62; col. 3, lines 38-54).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Loos et al. and to have employed polyethylenes having different densities as suggested by White et al. for the purpose of producing films for a variety of applications as is routinely practiced in the art.

Response to Arguments

Applicant's arguments filed January 17, 2008 have been considered, but are moot in view of the new grounds of rejection necessitated by the amendment to the claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. W./
Examiner, Art Unit 1791

May 8, 2008

/Monica A Huson/
Primary Examiner, Art Unit 1791